Estimating ‘Fisherian’ National Income to Account for Twentieth Century Economic Welfare Gains Generated by Improved Health

Despite unprecedented health improvements in developed economies over the twentieth century there have been a limited number of attempts to quantify these developments in health (defined here as mortality and crucially also morbidity). The paper outlines the development of an original quantitative methodology that can measure historical levels of health in terms of additional economic growth, so that national income can be defined on a utility or ‘Fisherian’ basis to include health outputs. Current measures of national income or GDP only include the cost of health services, with no accounting for the return. An additional contribution of the paper is that the health measure comprises both prevalence and quality of life (from the perspective of the sufferer) indices for the entire twentieth century.

Although it is not possible to provide precise ‘Fisherian’ national income estimates, it is possible to highlight that at a lower bound estimate twentieth century health improvements in developed economies have added in excess of 1 percent growth to per annum GDP per capita if defined on a utility or ‘Fisherian’ basis to include health outputs. In addition to presenting a new methodology the results make some progress in filling a crucial historical void about the positive value of mortality and more originally morbidity gains during the twentieth century, despite an increase in the prevalence of chronic diseases. These ‘Fisherian’ national income estimates provide more sanguine conclusions about the value and contribution of health gains to economic welfare and as such substantiate Nordhaus (1999) and Cutler & Richardson (1999) who have emphasised the value of historical health improvements and the need to more accurately measure the associated economic welfare gains. The results of the paper are also pertinent for their optimism about the social productivity of health care spending.

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